

TABLE 1

		Sample No.				
		1	2	3	4	5
Composition (Weight %)	SiO ₂	57.8	66.3	67.4	64.3	65.9
	Al ₂ O ₃	24.6	18.2	16.6	18.0	18.2
	Li ₂ O	2.7	2.3	2.3	2.5	2.0
	K ₂ O	7.0	3.4	3.5	5.0	3.4
	TiO ₂	2.8	1.8	3.0	3.0	1.5
	ZrO ₂	3.2	1.8	1.8	2.0	1.8
	ZnO	1.0	3.1	2.0	3.1	3.6
	MgO	—	1.0	1.0	1.0	1.5
	CaO	—	—	—	0.4	0.6
	BaO	—	—	—	0.5	1.4
	B ₂ O ₃	—	—	2.0	—	—
	Na ₂ O	0.4	—	—	—	—
	P ₂ O ₅	—	—	0.4	—	—
	As ₂ O ₃	0.5	—	—	0.2	0.1
	Bi ₂ O ₃	—	2.1	—	—	—
Condition of crystallization (° C)						
Temperature of nucleation		780	780	790	780	780
Temperature of crystal growth		1000	1000	980	1050	1000
Main crystal		β -silica solid solution	β -spodumene solid solution	β -spodumene solid solution	β -spodumene solid solution	β -spodumene solid solution